IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Appln. No.: 10/065,745	Art Unit: 2625
Filed: November 14, 2002	Examiner: Peter K. Huntsinger
For: APPARATUS, METHOD AND PROGRAM PRODUCT FOR CONTROLLING PRINTING	

Mail Stop **APPEAL BRIEF – PATENTS**
Commissioner for Patents
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<u>**REPLY BRIEF UNDER 37 CFR §41.41**</u>

REJECTION UNDER 35 U.S.C. §101

The Examiner's Answer (hereinafter "Answer"), mailed April 10, 2008, asserts in a section labeled "(10) Response to Argument" that "According to the applicant's specification, the machine-readable medium may be 'downloaded as a computer program product, …' .[1]" "Ordinary, simple English words whose meaning is clear and unquestionable, absent any indication that their use in a particular context changes their meaning, are construed to mean exactly what they say.[2]" While the program instructions may well be transmitted on a signal, the applicants are unaware of any way to store those

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1 Page 12, 10 a.

2 *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004). See also, MPEP 2111.1

program instructions. Further, although the claims are read in light of the specification, "it is important not to import into a claim limitations that are not part of the claim.[3]"

However, the Answer continues asserting that "Claim 9 is seemingly a patentable process, however it is in reality seeking patent protection of the computer program in the abstract as evidenced by applicant's specification. Because claim 9 is merely a computer program, it does not provide a practical application that produces useful and tangible results.[4]" Given that claims "combining the use of machines with a mental process, claim patentable subject matter;[5]" that a computer program combines the use of a machine (computer) with a mental process (the instructions) and therefore encompasses patentable subject matter. Though not being conceded nor argued at this time, one could argue that *Comiskey* even stands for the proposition that program instructions transmitted on a signal do constitute patentable subject matter.

REJECTION UNDER 35 U.S.C. §112

The Answer asserts that the "specification provides no disclosure that the sequencer would remain unchanged by adding and removing RIP machines.[6]" Nor does the specification provide any hint of a disclosure that adding and removing RIP machines changes the sequencer. The specification does, however, provide that "each controller can be configured, by adding RIP machines and connecting networks, to suit the needs of each customer.[7]" If adding and removing RIP machines changes the sequencer, then the application should have been rejected as non-enabling for failing to teach this. No such rejection was ever made.

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3 *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004). See also *Liebel-Flarsheim Co. v. Medrad Inc.*, 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004); *and see*, MPEP 2111.01 II.
4 Page 12, 10 a.
5 *In re Comiskey*, Slip. Op. II, page 24, lines 1 – 2.
6 Page 13, 10 b.
7 Application, paragraph 0010.

The Answer continues: "Further, the sequencer must make some accommodation for instructing an added RIP machine which would constitute the sequencer being changed.[8]" Not really. To the contrary, "[e]ach time a RIP machine can accept another work unit, **it contacts** the sequencer 21 **and obtains** the next unit of work.[9]" Therefore, a person of ordinary skill in the art would recognize that adding or removing a RIP machine would not cause the sequencer to change.

REJECTION UNDER 35 U.S.C. §103(a)

The Answer asserts that

> Barry '943 discloses a sequencer (instruction operator for job file 114 of Fig. la) which has **an** output port networked and communicating with (col. 4, lines 34-48, instruction operator 114 partitions print job into portions **sent** to RIP engines **via** distributor 116 [sic]), and **directly connected** to, the input ports of said plurality of raster image processors (Rip engines 150, 152, and 154 of Fig. 1b, col. 1, lines 41 -50).[10]

Specifically, the only output port 116 of the Barry instruction operator 114 is connected to the single input port 116 of the Barry distributor 118. Each of the input ports 156, 158, 160 to the Barry Rip engines 150, 152, and 154 are individually coupled to different individual output ports, respectively 142, 146, 151, of the Barry distributor 118. Therefore, regardless of whether the Barry instruction operator 114 is networked with the Barry Rip engines 150, 152, and 154; the single output port 116 of the Barry instruction operator 114 is not directly connected to the Barry Rip engines 150, 152, and 154 input ports 142, 146, 151.

The Answer continues, asserting that "[a]lthough the distributor 118 routes print job portions from sequencer 114 to the RIP engines 150-154 (distributor 118 functions only to direct data, see Fig. 1, col. 5, lines 46-51), the sequencer is considered to be directly connected to the RIP engines because there exists a wired connection in which

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8 Page 13, 10 b.

9 Application, Paragraph 0027, (emphasis added).

10 Page 13, 10 c.

the signal travels from the sequencer to the RIP engines.[11]" What happened to the Barry distributor 118? Without the intervening distributor 118, Barry would cease being functional.

The Barry distributor 118 has n outputs (n is 3 in the example of Barry Figure 1b) and the Barry merge 152 has n inputs. Barry clearly shows n functional paths 156, 158, 160 between the Barry distributor 118 and the Barry merge 152. While, Barry does indicate that the merge 152 is optional, that is because the paths may never merge[12].

As a further rationale for asserting that Barry teaches the sequencer output directly connected to the "directly connected to, the input ports of said plurality of raster image processors (Rip engines 150, 152, and 154[13];" the Answer continues "[t]he combination of distributor 116, path 142, and RIP engine 150 [output] can be viewed as one input to the output port of the **raster image processor**.[14]" So, the outputs can be view as an input to the output? Aside from the appellants being unable to determine what this means, it doesn't even approach what the claims recite.

"This occurs in the same manner as a computer that is considered directly connected to a network although it may be **connected through** a router or modem[15];" or, that a circuit connected between a power supply and ground connects the supply directly to ground. Appellants aver that in both instances because there is intervening structure, there is no direct connection. "Further, the claim specifies the output port of the sequencer is networked with the input port of the raster image processor which indicates

11 Page 13, 10 c.

12 *See, e.g.*, col. 5, lines 29 – 31 ("The outputs of the RIP engines 150-154 may be in different locations, such that a merge operation is not called for.").

13 *Supra.*

14 Page 14, 10 c. (emphasis added).

15 *Id.* (emphasis added).

that the path comprises other components besides simply a straight path[16]." Not if the two components are *directly* connected to one another!

Next, with regard to claims 10 and 11, the Answer asserts that "the applicant must explain why the system of Barry '943 in view of Vankateswar '016 does not teach the claimed limitation, not the system of Vankateswar '016 in view of Barry '943.[17]" What is the authority for this assertion as to how the applicant must apply the references? These two references are combined and must be viewed as a whole for the entire content of what each teaches, not just what bits and pieces may be culled from each and combined to, allegedly result in the present invention.

Moreover, bearing in mind that, "[i]f the proposed modification or combination of the prior art would **change the principle of operation** of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious;[18]" as noted hereinabove, the Barry clearly shows n functional paths 156, 158, 160 between the Barry distributor 118 and the Barry merge 152. Increasing the number of Barry functional paths 156, 158, 160 to $n+1$, i.e., adding one or more functional paths requires changes to both the Barry distributor 118 and the Barry merge 152. By contrast, because the claimed sequencer "has an output port networked and communicating with, and directly connected to, the input ports of said plurality of raster image processors and an input port receiving a print data stream,[19]" one may add raster image processors without changing the sequencer as claims 10 and 11 recite. Furthermore, modifying Barry such that the Barry instruction operator 114 is connected to input port of the Barry RIP engines; and further, so that one may add Barry RIP engines without changing the Barry instruction operator 114, clearly requires changing a Barry principle of operation; and therefore, is not obvious.

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16 *Id.*

17 Page 15, 10 d.

18 *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (emphasis added). *See also*, MPEP §2143.01 VI.

19 Claim 1, lines 8 – 10.

Next, with regard to the recitation of "communicating queued packaged print stream data portions directly over a network to a plurality of raster image processors;[20]" the Answer asserts that "[b]ecause the parallel processors of Vankateswar '016 are interconnected to the master processor, they are considered networked.[21]" Not by Vankateswar et al! This reading requires that the master processor be part of the network; but the claims do not recite that the communication is to a network or through (the master processor to the RIPs) a network of processors.

The Answer further notes that, "the master processor communicates directly to the parallel processors (abstract, col. 2, lines 21 -28, the main processor converts print data into **paths** that are then rasterized using parallel processors in concert with the main processor).[22]" However, that communication is individual over each path to one of the parallel processors; and, is not over a network, much less, "over a network to a plurality of raster image processors" as the claims recite.

Finally regarding claim 5, the Answer asserts that the "combination of Barry '943 with Fujii '390 and Hohensee '460 does[23]" disclose "a pipeline of elements connected between a print server and a printer and processing print control data from said print server,[24]" because "Barry '943 discloses a pipeline of elements connected between a printer server (control PC 1020 of Fig. 10, col. 15, lines 10-28) and a printer (printer 1026 of Fig. 10, col. 15, lines 10-28).[25]" However, those elements are not what is recited by claim 5, lines 4 – 23. Instead, this argument ignores the pipeline elements claim 5 recites, as a whole.

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20 Claim 6, lines 5 – 6 and claim 9, lines 8 – 9.

21 Page 15, 10 e.

22 Id, (emphasis added).

23 Page 16, 10 f.

24 Claim 5, lines 2 – 3.

25 Page 16, 10 f.

In determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences **themselves** would have been obvious, but whether the claimed invention **as a whole** would have been obvious[26]. Therefore, not only must the combination disclose "a pipeline of elements," those elements must be arranged as claimed.

Appellants note that in Barry the direction of data is unidirectional, indicated by the arrowheads, i.e., data/signals propagate from the Barry user PC 1008 to net interface 1026 in the direction of control PC 1020. There is nothing to indicate any communication in the other direction, i.e. from the Barry control PC 1020 to the Barry printer 1018. Therefore, the Barry control 1020 cannot be considered a print server, at least with respect to the Barry printer 1018 or claim 5.

Moreover, other than in Figure 10, Barry fails to even mention 1018. Barry does state, however, that "the user PC 1008 has associated therewith a display 1012 and a database 1014.[27]" It is clear, therefore, that the Barry printer 1018 is simply a local printer associated with the Barry user PC 1008.

Further, as previously noted, Fujii et al. teaches with reference to Figure 2a that a "drive voltage pulse signal is applied by **head driver** 62 between the common electrode 61 and individual electrode 60 of the nozzle to be driven.[28]" That "drive voltage pulse is applied appropriately from a head driver 34 to the corresponding ink jet head unit 5 to discharge an ink drop from the ink nozzle.[29]" By contrast, Barry et al. teaches that "[t]he print job input 100 is provided to a print driver 102 as a print job file 104 and is output from print driver 102 along a line 106 to a print spooler 108.[30]" Very clearly, the Barry et

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26 *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). See also, MPEP §2141.02.

27 Barry et al., col. 14, lines 62 – 63.

28 *Col.* 6, lines 14 – 17 (emphasis added).

29 Id, lines 67 – 69.

30 col. 3, lines 13 – 15.

al. print driver 102 is not driving a Fujii et al. print head; and so, is not a print head driver within the plain meaning in the art as evidenced by Fujii et al. or within the meaning set forth in either specification[31].

CONCLUSION

Claim 9 recites a "computer program **product** comprising a **computer readable medium** with program **instructions stored thereon** and effective when executed by a computer system to cause the computer system[32]" and, therefore, claim 9 is statutory. Claims 10 and 11 are enabled by the application as filed because a skilled artisan would understand that as a result the sequencer remains unchanged by adding and removing RIP machines.

Neither Barry et al., Fujii, nor any other reference of record teaches or suggests "a sequencer which has an **output port** networked and communicating with, **and directly connected to**, the **input ports** of said plurality of raster image processors[33];" Venkateswar et al. in combination with Barry et al. and Fujii et al. fails to result in the present invention because one could not connect and disconnect raster image processors from the combination without changing the sequencer[34]; neither Barry et al., Fujii et al., Venkateswar et al., or any other reference of record teaches "communicating queued packaged print stream data portions **directly** to a plurality of raster image processors[35]," and because no reference of record shows or suggests "a pipeline of elements connected **between** a print server and a printer and processing print control data from said print server,[36]" for the pipeline elements as claimed. Therefore, Barry et al. in combination with Fujii et al., alone or in further combination with any other reference of record, does

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31 *Supra.*
32 Lines 1 – 3 (emphasis added).
33 *Supra.*
34 Claims 10 and 11, lines 3 – 5.
35 Claim 6, lines 5 – 6; claim 9, 8 – 9 (emphasis added).
36 Claim 5, lines 2 – 3 (emphasis added).

not result in the present invention as recited in any of claims 1 – 11; *prima facie* obviousness under 35 U.S.C. §103(a) has not been shown for any of finally rejected claims 1 – 11; and, the final rejection must be reversed.

Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 50-3669 and advise us accordingly.

Respectfully Submitted,

 June 9, 2008
   (Date)

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